Concide Explanation
of the Charch Mases

e.c. Spercer

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A CONCISE EXPLANATION

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THE CHURCH MODES,

WITH REMARKS ON

THE MUTATIONS WHICH THEY HAVE UNDERGONE SINCE THE INVENTIONS OF THE HEXACHORD

AND THE

MODERN TONAL SYSTEM OF MUSIC;

TO WHICH IS ADDED

AN EXPLANATION OF THE HARMONIES AND MODULATIONS
PECULIAR TO THOSE ANCIENT GAMUTS.

BY

CHARLES CHILD SPENCER.

SECOND EDITION.

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PREFACE TO THE SECOND EDITION.

THE object of the following tract is to exhibit the primitive forms and seats of the gamuts, in which the Ritual Music of the Church is composed, and to point out some of the secular changes made therein since the end of the tenth century. The Cantus Firmus, or Plain Chant, is founded on the ancient Greek Tetrachords,*

B. C. D. E. and E. F. G. A.

and the simpler forms of the Gregorian Tones, as they are called, can be traced to them.

The tone, or melody for the Psalm "In exitu Israël" consisted originally of two notes, and is of the third century, and the form of the first tone, called in England Tallis's Chant, consists of three, and it will be seen what additions time has made to them.

"The chief character of the plain chant," says Forkel,† "is slow and pious solemnity, connected with so much comprehensibility, that it can be sung in unison by a whole assembly of persons. A proof of its antiquity is the circumstance that the genuine Church melodies are set in the ancient Greek modes, which modes, by the peculiar, and indeed sometimes rigid nature of the progressions, are eminently adapted for

^{* &}quot;Fundamentum Cantus," says Gerbert, "erat antiquus cantus Græcorum, atque iisdem insistebat principiis."—Musica Sacra. See also Alfieri's "Saggio Storico-Teorico-Pratico del Canto Gregoriano o Romano." 1835.

⁺ Gesch. der Mus.

vigorous solemn expressions, and are, in comparison with the modern gamuts, nearly what the language of scripture is in comparison with the modern dissimilar, flexible, and refined profane languages. Thus it is that, in later times, particularly since the middle of the seventeenth century, we have a more certain loss in those ancient melodies being so frequently changed for modern ones. Hence we seldom find the genuine plain chant in our churches, but we are obliged to seek for them in the ancient ritual books,—in the works of a few old and great Church Composers. Nothing can sound more solemn and devotional than a psalm melody set in harmony in the ancient Church modes, the most beautiful examples of which are by John Sebastian Bach."

I believe there is not any work on these ancient gamuts in the English language; and until the present century nearly all the treatises on the subject were in the Latin and Italian languages. There are now works in Germany, as well as Rome, by Church Musicians (both clerical and laymen) desirous of seeing the modes restored to their proper place in the science of music; but nearly all the manuals are confined to the simple plain chant. Mortimer of Berlin has produced a work showing the superiority of the modes to the modern scales for the purposes of psalmody, and the examples he gives contain the figured basses, but this work is confined to the Choräle of the early reformed churches.

Kirnberger, the pupil of Bach, endeavoured to call the attention of his cotemporaries to the fallen state of Church Music, and says: "The ancient Church modes are too much neglected, especially in Protestant countries, where Church Music is almost universally very badly performed. Even in Catholic countries it is sunk so low that it can scarcely be distinguished from theatrical." The coldness and indifference to which Church Music is subjected is said to be "attributable to the too frequent use of music in general;—to the

want of sufficient knowledge of music and musical matters,—to the consequent misuse of music, and to the niggardly expense allotted to it even in the richest church establishments."* The truth seems to be that operatic music has for a long time superseded ecclesiastical, and until the ancient modes are restored it does not seem probable that any attempt to write real Church Music can succeed. "Church Music without Church Gamuts is not ecclesiastical, but secular music."†

To these (and they are but few of the) complaints, might be added that of the loss of the madrigal school of writing, another certain consequence of the reduction of the modes to two, and the establishment of the modern laws of modulation.

I therefore hope that this little (and very incomplete) tract will not be without some advantage; that it may at least excite the attention of more able musicians to this neglected branch of musical science.

The examples are taken from the various "uses" or ritual music books, and the psalm books of the Lutheran and other churches; and the reader is referred to the madrigals of the sixteenth and seventeenth centuries, which are now so easy of access, for the purpose of tracing the more elaborate harmonies and modulations peculiar to the Church modes.

In the first part of the work is given a proper definition of the words authentic and plagal, and their real signification and use are shewn in the second part. In the first part the C cleff is used for the better explanation of the exact seats of the modes, and the G cleff is substituted in the second and third parts for the more convenient exhibition of the harmony.

The Choräle are given as they are harmonised in the various manuals, by Bach, Kirnberger, Schülz, Schein, Graun, Mortimer, Buttstett, and

^{*} Forkel, Einleit.

others. The ancient cantus chorales, the hymns, antiphons, &c., are harmonised in accordance with the laws of the modes by myself, and no attempt has been made therein to introduce refinements. These are given in the examples by Bach: I have chosen the simplest chords necessary for the illustration of the text.

C. C. S.

A CONCISE EXPLANATION

OF.

THE CHURCH MODES.

The word mode signifies scale or gamut. In modern music there are but two modes: the major and the minor diatonic scales; but in ecclesiastical music, i.e. in the antiphons, chants, &c., of the ancient church, there are twelve modes more or less frequently used; of which the major and minor scales of the present day are, in fact, the only two retained, even in the so-called sacred music, which has been most used, and most known, since the establishment of the Neapolitan school of music.*

But a mere knowledge of the laws of the modern major and minor scales, and of the rules of counterpoint as laid down by the disciples of this school, is not sufficient to enable us to understand the really sacred and ancient music of the church; we must be thoroughly acquainted with all the modes, and with the peculiar properties which each mode possesses within itself,† or we shall not only be perpetually embarrassed in our perusal of the ritual-books in which this singularly beautiful and only true church music is to be found, but also very much restricted in the scientific resources which these gamuts open unto us.

* A.D. 1740 is the date of this school.

† "The ancient choral melodies are remarkable, not only on account of their great number, but principally on account of their quality. The impression is universal and lasting that they possess in themselves something which now-a-days can no more be obtained."—MORTIMER. Der Choralgesang. The whole of the twelve modes may be formed out of the following series of seventeen notes of the modern gamut,



by taking successively the notes D, E, F, G, A, and C, and forming six different diatonic gamuts, in the following manner:



and, again, by taking the fourth note below the initial note of each of these, viz., A, B, C, D, E, and G, successively, and forming six other diatonic gamuts as follows:



It will be perceived that the first and tenth gamuts are identical; as are also the second and eleventh, the fourth and twelfth, fifth and seventh (the seventh being an octave lower than the fifth), and the sixth and ninth (the ninth being an octave below the sixth).

^{*} Greek 'Ymò. Under the power or influence of.

But although there is this identity of notes and intervals, yet, in the treatment of these modes, there are essential differences, which make them distinct from each other, and give to every gamut its own peculiar properties; these shall now be explained.

The first six modes are called authentic* (i.e. superior) modes, as possessing authority, as ruling the remaining six modes which are called plagal† (i.e. inferior) modes, as being derived from the authentic, and subject to them. For each plagal mode has the same final note as its corresponding authentic mode, and which is the initial note of the authentic. For example, the seventh mode is formed out of the first, and has therefore the note D for its final: similarly, the eighth mode has the same final as the second, viz. E; the ninth has the same final as the third, viz. F; the tenth has the same final as the fourth, viz. G; the eleventh has the same final as the fifth, viz. A; and the twelfth has the same final as the sixth, viz. C.

Each mode has a dominant note, i.e. a prevailing note, not a governing note in the sense in which the word dominant is used in the modern system of music. The dominant of a mode is not necessarily the fifth note of the gamut, nor the fifth note from the final. In the first, third, fourth, fifth, and sixth modes, in the foregoing order, the dominant is the fifth note from the final; in the second mode it is the sixth note from the final; in the seventh, ninth, eleventh, and twelfth modes, it is the third from the final; and in the eighth and tenth modes, it is the fourth from the final, as may be shown thus:

- * From the Greek $A\dot{v}\theta\epsilon\nu\tau\dot{\epsilon}\omega$, to possess, exercise, or assume authority.
- † Πλάγιος, ambiguous, equivocal, indirect.
- ‡ In many of the ancient chants, &c., not only does the melody close on the dominant of the mode, but the harmony also closes with the chord of this dominant.

			Final Note
I	D A	A }	D
VII	A	F J	D.
II	E	C]	107
VIII	E B	A S	E.
III	F C	C)	177
IX	- · - C	A }	F.
IV	G	D }	C
X	D	C }	} G.
V	A	E)	
XI	A E	C }	A.
VI	C	G)	~
XII	G	G }	C.
VII	G	Ei	

This may be also shown by placing each pair of (what may be called relative) modes in juxta-position, and numbering them in the following manner, as is most usual:



Authentic Modes. VII. MIXO-LYDIAN. DOMINANTS. FINALS. DOMINANTS. FINALS. IX. ÆOLIAN. XI. IONIAN. XII. HYPO-IONIAN.

The first four of these authentic modes were established in the church by St. Ambrose, who introduced the antiphonal mode of reciting the Psalms, &c., into the church of Milan, "after the custom of the inhabitants of the East;" and "the rest of the churches" followed the example of that of Milan.* And we are told by writers on ecclesiastical music, that the four plagal modes derived from these authentic modes were established in the Roman Church by St. Gregory, in whose time, all these writers inform us, the music of the church had fallen into such a corrupt state, that he determined to correct the further neglect and mutilation thereof. For this purpose he selected from the music of other churches such examples as he

" Tindently suttor has fallen into common error as to meaning of "antiphonal" - considering it are meaning against "cielernating" inclose of the ancient meaning of "accompanying" "fellows to seechalpell margarren oc.

^{*} The custom of singing antiphonally prevailed in the churches of Egypt, Thebes, Palestine, Arabia, Syria, Phœnicia, and amongst those "dwelling about the Euphrates," and moreover in the vernacular language.—See Paulin, Augustin, Basilius, Bona, &c.

thought most suitable for the divine offices, and collected them together in two volumes of antiphons and graduals.*

These eight modes were in after times called the eight "ecclesiastical tones," (Toni Eccles.) the word mode, signifying gamut, being made to give way for the word tone, signifying also gamut.† The multiplicity and variety of antiphons, graduales, &c., &c., to be found in the different books of the English and continental catholic churches is amazingly great, and the grandeur, sublimity, and devotional effect of most of them is truly astonishing. But how often has it been lamented by the old and pure writers on this subject, that this sublimity, grandeur, and devotional effect should be, in so many instances, entirely destroyed by the mutilations and innovations of aftertime musicians—"Peccant qui summam artis suæ in eo positam esse arbitrantes ut prolixissime cantent, textam ecclesiasticam multiplicandis modulationibus lascerant, et in aures audientium cum intolerabile fastidio inculcantes."

The transgressions complained of were of various kinds, but nothing tended more to the destruction of the sacred character of the music than the departure in so many instances, from the simple modes; by the substitution of the hexachord of Guido, for the pure Dorian and Lydian modes; and as this substitution is (and most probably will be still) allowed to

- * The antiphonal and other modes of singing were introduced into the church of Rome long before the time of Gregory. Without being desirous of detracting from the merits of this great saint, one may doubt if they are not overrated, at least so far as the originality and purity of the Cantus Firmus is concerned. Who would expect that the absurdity called the Neuma (still retained in the Roman and other ritual-books, although very seldom used) claims St. Gregory, the "reformer" of the church music, for its author! Yet Honorius Augustodunensis in his "Gemma Animæ," lib. 1, cap. 88, and Cardinal Bona in his "Psalmodia," cap. 17, attribute the invention to him.
- † Absurdly enough, and very perplexing to the student, this word tone is used also for chant or melody, written in the mode or tone as numbered in the books, first tone, second tone, &c. &c.

remain, notwithstanding the great detriment to the sacred character of the music caused thereby, the said hexachord is here presented in all its positions in order that the student may be able more easily to comprehend the music of the ritual-books set therein, but announced in these books as being set in the pure modes.



But it is the third position, namely, that in which B? occurs, which is

chiefly used, or, perhaps (in the more modern music of the continental churches) the modern relative keys F and D.

As this tract is intended to be as concise as possible, and as the subject need not be dwelt upon too long, it will be sufficient for the intended purpose to exhibit a few only out of the very many secular changes which have been made in the choral chant, whereby it will be seen how nearly the original sublimity of character, which so peculiarly distinguishes this kind of music from every other, has been destroyed, by the mutilation of the modes in which the specimens are said to be set.

It must be remembered, that not one of the modes admits any alteration in its degrees; and it is only by a strict adherence to this law that the solemn, dignified, devotional, and sacred character, which is the distinguishing property and quality of the ancient cantus choralis, can be maintained.

It is not hereby said that in the organ accompaniment, no harmony which requires in its construction a departure from the original mode, should be employed. Such a rule as this would deprive the musician of the rich and manifold resources which the modes contain, and which enable him to express, by a diversity of grand and beautiful combinations judiciously introduced, the various sentiments of a long psalm, canticle, or hymn, and which cannot be done by adhering to the harmony of the original gamut alone; but what is meant is, that no change should be made in the melody itself. It will be seen in the following specimens that the dignified and vigorous character of the melodies is entirely lost in consequence of their being made subservient to the modern laws of harmony.

We here give two examples of corrupt mediations of the psalm melody, set in the so-called "first tone:"



The latter of these is the mediation of what is called, by some, the "eighth tone irregular," and by others it is said to belong to the first tone; in fact, in the above form, it belongs neither to the first nor eighth gamuts, but, properly speaking, to the ninth, or Æolian mode (p. 12).

The earlier forms of this medial are found seated in the Doric mode, thus:



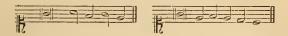
which are vastly superior to the foregoing.

This chant, it is said, was first introduced in the more solemn celebration of the Paschal festivities, when the 113th psalm, "In exitu Israël," &c., was sung in the "processione vespertina Paschæ ad Fontem Baptismalem," and it was afterwards introduced into the Dominical vesper service, in which "Memoria Resurrectionis Domini" is in like manner celebrated.* But it appears that processions did not take place until after the vision of Constantine.† If this be correct, we get, pretty nearly, the date of this psalm melody.

To proceed with the specimens of corruptions in the church modes, we find the following similar changes or interpolations in the psalm melody of the "fifth tone."



Since the Lydian mode does not admit the B7, it is clear that these examples either do not belong to it, but more properly to the eleventh, or Ionian mode, as thus:—

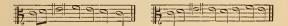


or else they are corrupt. In the latter case, we see the substitution of the hexachord; in the former, the recent date of these terminations.

Similarly, the following examples of the "sixth tone"



are corrupted, by the same substitution of the hexachord, or else they are modern melodies in the twelfth, or Hypo-Ionian mode,



which shows them to be merely transposed into the key F major.

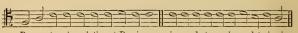
Although these forms have been long in use in the continental churches, yet it is acknowledged by all the sterling writers that they do not belong to the Lydian and Hypo-Lydian modes, "because these do not admit B7, but since the introduction of the organ, this mode is treated as the modern diatonic scale F major." That is to say, some organists treat it thus because they do not know what to do with the major fourth (B\$\mu\$), nor how to avoid placing "Mi contra Fa." But the Lydian mode is not always treated as the major key F; for there are many beautiful specimens of antiphons,

&c., set in this mode, from amongst which the following is selected, as it will show in what manner the major fourth is used, and how the descent from it to the final is avoided.

ANTIPHON-FIFTH TONE.



Then follows the psalm, "Beatus vir," in the same mode, with the beautiful terminal, thus:



Be - a - tus vir qui ti-met Dominum: in manda-ta e - jus vo-let ni-mis.

Changes have also been made in another form, by treating the Hypo-Dorian mode as the modern diatonic scale D minor,* thus:

TERMINAL.



the latter form being pure, and found in many of the ritual-books and manuals.

Of course, having changed the Lydian mode into a major key, it became necessary to provide a relative minor key for it.

Again, we find the following example of the intonation and mediation of the psalm melody of the "fourth tone" treated as if it were set in the modern diatonic scale A minor,

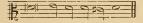


the latter being the pure form more frequently given in the manuals and ritual-books, and in the Hypo-Phrygian mode.

In like manner, the terminal of the psalm melody of the "sixth tone" is changed into the modern diatonic scale G major, by the needless introduction of F#, thus:



the latter form alone being seated in the Hypo-Lydian mode. So also the following terminal of the psalm melody is given in manuals and ritual-books as being seated in the Mixo-Lydian mode, or, as it is called, the "seventh tone," thus:



In a German manual it is said "the note before the end note must be sung as a semi-tone," thereby proving this example not to belong to the "seventh tone," but to the modern diatonic scale D, otherwise the necessity does not appear.

The above examples show how completely the noble vigour of the rigid and pure melodies is destroyed, and that an effeminate softness and secularity of character is substituted in its place. "One traces the downward progress of the church chant; it becomes more refined, and almost ceases to be quire music,"—Herder.

The substitution of the hexachord has been condemned by many excellent writers, and we have the following remarks on the practice of transposing the modes written by a canon of a Roman Catholic Cathedral, in the sixteenth century.

"Hee est vera et regularis sedes atque constitutio singulorum tonorum [gamuts] ex ratione suarum notarum dominantium et finalium, a quibus pendunt. Si quando aliter positi, et in alias sedes translati leguntur (ut non rarò accidit in libris manu notatis) error est, natus ex temeritate vel inscitia scriptorum." Yet, nevertheless, these substitutions and errors still remain.

The transposition might be made for the sake of convenience, to suit the greater number of voices singing together, but then one gamut should not be substituted for another. In the legitimate position of the Mixo-Lydian mode, or "seventh tone," the psalm melody carries the voice up

to F . And what the pitch of this note may have been in very early times it would be very difficult to ascertain, but we do know from the experiments of Dr. Smith, published at Cambridge in the year 1749, and from those of Fischer, published in the Memoirs of the Berlin Academy in 1823, and also from the "Philharmonic pitch," that it is raised nearly a whole tone higher than it was about a century ago."

Ecclesiastical writers in describing the characters of the modes, say, "Septimus est juyenum," inasmuch as it requires "youthful vigour, and a

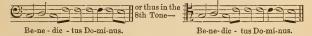
^{*} Smith (Harmonics) gives 393, and Fischer 430 vibrations for the note A, second space in the treble. Woolhouse in 1835, and the author of this tract in 1844, found by experiment, 424 vibrations for the same note according to the Philharmonic fork. The ratio ξξξ, or ξξξ is very nearly γ5, which is the ratio of a minor tone.

high, clear-toned voice." There is therefore a reason for transposing the melody, but none for altering the intervals. Alterations have been made with, perhaps, the greatest "boldness" in the terminations; such as the following:



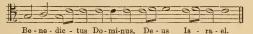
This example is taken from Liston's work published in 1534, and is found amongst superior terminals of the same tone in the Directorium Chori, but its irregular close is not approved, and, says a writer, "Ubi occurrit hee terminatio corrigenda est, et revocanda ad regulum;" i.e. it ought to close with the dominant of the mode.

The following solemn intonation of the melody of the "second tone" for canticles

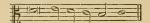


is considered impure, the more ancient form does not contain the descending semitone; and we are admonished not to use it in these words: "admonendi sunt qui celebrant divina officia ne sequantur vitium quod quibusdam libris notatis adhæsit, et frequentur usurpatur in parochiis ex usa Monachorum, inserendo scilicit notulam Mi post Fa ante Elevationem in mediatione." The writer says the intonation and mediation ought to be thus:—

EIGHTH TONE.



which is unquestionably more majestic and solemn than the former. A multitude of similar irregularities might be exhibited to prove how frequently the attempt has been made to destroy the original purity and ecclesiastical character of the ancient chant, but as a last example the following termination of the psalm melody of the "seventh tone," taken from the Directorium Chori, will serve:



which is made effeminate by the addition of the last two notes. "Expungendum est," says an old writer, "illud Mi (B) quod scribitur in libris." These irregular closings of the psalm melodies are occasioned by the peculiarities of the antiphons which precede or follow them; but then the greatest deformities occur in these antiphons, as well as in the graduals and introits; for in all these kinds of church compositions it is not possible to discern any particular mode, although great care is taken to mark the number of the "tone" at the commencement thereof. They are, in truth, with some few exceptions, set either in the hexachord, or the present diatonic scales.

One of the earliest deviations from the original simplicity of the ancient chant is the coda attached to many of the antiphons used at particular festivals, and which is called the *Neuma*. This consists of an indefinite number of notes which are to be breathed out vocally after the antiphon is finished, not on a word or particular syllable, but merely on any vowel which may be most convenient to the singer. "The neuma ought to express the effusion of a lively, solemn joy, not shown in the words, but rather in a kind of shout of joy." Cardinal Bona says: "St. Gregory longum edit sonum jubilationis pluribus notis sub una syllaba descriptis, quod maxime fit voce Alleluja." But the neuma is most commonly found after the allelujah, or other ending of the antiphon, and "although," says a modern

writer, "it is no longer used, yet it serves, as well in the allelujah as in the Kyrie Eleison, to procure sufficient time for the priest and those serving with him at the altar, to say their prayers slowly and with gravity."

This explanation will account for the length of some of them, such for example, as the following antiphon and dismission:—

ANTIPHON, SEVENTH TONE. NEUMA.



Some of the specimens of these "breathings" would provoke anything but seriousness, notwithstanding their intended purpose, unless the person chanting them possessed peculiar advantages of voice and style.

The ancient musicians have been absurdly charged with caprice, and with ignorance, with respect to the major and minor intervals, apparently because most of the cadences in their melodies are made by the ascension from the penultimate to the ultimate note through the interval of a tone. But in this they have only observed the peculiarities of the modes themselves, and preserved the distinguishing ecclesiastical qualities of the ancient melody. These unjust accusations have been well answered by a modern author, whose words are here transcribed for the sake of the student.

"If it merely depended on authority, the contemners of the ancient church music might be triumphantly answered by reference to the names of Sebastian Bach, Sulzer, Kirnberger, and others. It is a known thing, that, in former times, all choral melodies were set in the so-called church modes.

Here now appears a stumbling-block. Many are inclined, so soon as they hear of these modes, to explain them as mere fancies; indeed, it is expressly said in the current instruction books, that they are of no value whatever; because there are but two modes, major and minor, and to major and minor must it be possible for every species of music to be reduced. That a certain reduction of the ancient modes is possible, cannot be denied; for it is matter of fact that we have already reduced many of the old melodies, but then it is also as certain that, by no reduction, has every trace of the ancient modes been destroyed; and that even these relics it is which occasion those troublesome and vexatious questions, which ought not to be raised in the present day, since we compose melodies which stand in need of some such reductions. When it is said that all music ought to be reduced to the modern major and minor modes, there is, with respect to the ancients, a misunderstanding at the foundation, or rather a most singular delusion, which has destructive consequences. It is a very evident truth, which the pupil soon comprehends, that every musical interval is either major or minor. Now, when it is asserted that the ancients might have been so capricious, that in their music the intervals could be neither major nor minor, or, indeed, when it is said they might have known no difference between major and minor, the student is deterred from being interested in those things which concern the ancient modes; whereby all advantage for the science of church music, which might be derived from these modes, is entirely lost; an important part of knowledge necessary for future church composers is withdrawn, and the perpetual complaint, that the present church music can no longer be distinguished from the theatrical. cannot be helped."

Another author laments the changes which have taken place in these words: "In our days has a certain spirit of levity sought to make the value of these long and universally esteemed compositions doubtful. One has found them obscure, stiff, and tedious; one has made proposals to improve them, or to supersede them by other music supposed to be more

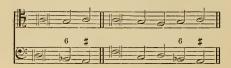
beautiful and striking; one has left the greater part of them out of the psalm-books, or so limited their use, that it is just as bad as if they were wholly laid aside; one has, moreover, frequently taken away almost all their vigour and importance by a perverted application, and, as regards the harmony, by a treatment which has entirely failed."—Rambach.

With respect to the harmonies proper for the accompaniments of the chants, it is not intended to say more than that these must depend on the science and genius of the organist; but it may be observed, that a mere knowledge of the modern tonal-harmony laws is not sufficient to develop all the glorious varieties of chords which this species of music will admit. Whoever will acquire a knowledge of the harmonies generated by the church gamuts, will find a splendid field opened for him to exercise his genius in; and no branch of the science can be perfected without this knowledge, nor so amply reward the student for the labour and pains he may bestow upon it.

It would require more space than this tract allows to enlarge upon this subject, but an example or two may not be unacceptable. The following is the melody commonly known as "Tallis's Chant," but which is one of the most ancient specimens of the Cantus Choralis to be met with. This melody belongs to the Doric mode (see pp. 8 and 11), but is set by Tallis in the modern key F major, thus:



Although this harmony is very good, and much more grand than the har mony of most of the chants composed since his time, and although there is no alteration of any note of the Doric gamut in any of these chords, yet it cannot properly be said to be harmonised according to the law of the mode, which requires either the harmony of the final or the dominant, both at the commencement and termination of the melodies set therein. But it is clear, from the progression of the notes of the melody, that although it may commence with the chord of the final, yet this harmony cannot be employed at the close. Hence we find the accompaniment in another form, as follows:



But this is treating the melody as if it belonged to the modern scale D minor, and the mode itself is mutilated, if not destroyed by the substitution. It is therefore ventured, at the risk of causing some surprise to those who are only accustomed to the modern system of music, to give another method of harmonizing the above psalm melody, which, at least, is strictly according to the laws of the mode; and although the character of the harmony is primitive, it has the advantage of being ecclesiastical, simple, and grand.



Whenever the Cantus Choralis is altered to accommodate the laws of the modern system of music, it loses at once its ecclesiastical function, and cannot then be distinguished from secular music. This may be illustrated by many examples taken from printed books in present use, but one alone will be sufficient. The following is known as the "second tone," that is, psalm melody of the Hypo-Dorian mode (see pp. 9 and 11).



This is manifestly the scale D minor, and the harmony will suit any piece of secular music quite as well as this. But compare it with the next example, in which the law of the mode is rigidly observed.



Here the ecclesiastical character is preserved.

It is purposed, hereafter, to give rules for the adaptation of the ancient psalm melodies to the English Psalter; in the meantime the reader is referred to the "Hymnal" for some specimens of the simpler forms of the Cantus Choralis, arranged to the prose hymns, canticles, &c., used in the offices of morning and evening prayer.

* "Hymnal: containing the Prose Hymns, Canticles, Psalms, Antiphons, &c. noted to the Ancient Song of the English Church. Published by G. Bell, 186, Flee Street. 1844."

In conclusion, the author trusts that in this attempt to call the attention of his professional brethren and others to this noble branch of musical science, and to show by reference to facts and sound judgment what great injustice has been done to the unrivalled music of the ancient Christian church, his motives may not be misconstrued, nor his inexperience as a writer too severely criticised. If it be desirable to restore the ancient Cantus Choralis, it surely ought to be sought for in its original state, and, if possible, reintroduced in its original simplicity, beauty, and fitness for ecclesiastical purposes.

A CONCISE EXPLANATION

OF THE

CHURCH MODES.

PART II.

In the following portion of this work, the author's intention is to exhibit, in a concise and simple manner, the relation between each pair of authentic and plagal modes, and the entire subjection of the latter to the former, in consequence of the natural harmonies, proper to accompany them both, being derived from the authentic mode alone; and also to shew the relation which each pair of modes has to every other pair; and to point out the essential differences between them and the modern major and minor gamuts.

By construction, the Lydian, Hypo-Lydian, Mixolydian, Ionian, and Hypo-Ionian modes are major,—the remaining seven modes being minor; *i.e.*, the interval between the first and third degrees is major in the former, and minor in the latter.

Again, the Doric and Hypo-Mixolydian have a major 6th; the Hypo-Dorian, the two Phrygian, and the two Æolian, have a minor 6th. The 5ths are perfect in all except the Hypo-Phrygian, in which it is false, or imperfect; and hence the 6th note (C) of the authentic Phrygian mode is made the dominant, instead of the 5th, (B).* The 4ths are perfect in them all, except the Lydian au-

^{*} In all the other authentic modes the fifth is the dominant.

thentic, in which it is the Tritone. Lastly, in the Lydian, Hypo-Lydian, and Ionian modes, the 7th is major; in all the rest it is minor.

The essential differences between those modes which are similar in construction,* consists in their having different dominants, and in their treatment with respect to the harmonies proper for their accompaniment. For it will be observed, the similarity exists between some authentic and plagal, and not between any two authentic nor two plagal modes: for every plagal mode being merely a downward continuation of its relative authentic,† receives from this alone the harmonies proper for its accompaniment; whereas, every authentic mode has its own harmonies, generated within itself, and exercises absolute control over its subordinate plagal.

In the genuine Cantus Choralis, or Plain Song, no degree of the gamut was changed from minor to major, nor from major to minor, until after the invention of the additional notes, Bb, C#, &c. &c.; i.e., not before the eleventh century, in the early part of which Guido introduced the "B rotundum," or Bb. In the fifteenth century, the organs then in use had the following semi-tonic scale, viz.: C, C#, D, Eb, (not D#,) E, F, F#, G, G#, (not Ab,) Bb, and B\$.‡ The notes D# and Ab were added by Zarlino about the

^{*} See p. 10.

[†] Alcuinus (in the eighth century) says: "Plagii dicuntur, quod nomen significari dicitur pars sive inferiores eorum Authenticorum, quia, viz., quædam partes sunt eorum, dum ab eis ex toto non recedunt."

[‡] Prætorius (Organography) says there were old organs existing in his time (first half of the seventeenth century) having only three half-tones, viz., between E F, B C, and between A Bb. The organ at Bamburg, built by Rosenburger, (1475) had thirteen pedals from A to A, which compass was afterwards extended to F downwards and to Bb upwards, containing all the semitones.

middle of the sixteenth century. These latter notes are met with, here and there, in the works of the masters of the latter half of this century, and their earliest use is ascribed to Cyprian de Rose, and also to Orlando Lasso.

Without the use of these additional notes we can have only six common chords, viz.: the major chords of C, F, and G, and the minor chords of A, D, and E, together with their first derivatives or chords of $\frac{6}{3}$; and these are the primitive accompaniments to the series of seventeen sounds* comprising the twelve modes. (Ex. Part III.) By the addition of Bb, two more common chords, viz., Bb major and G minor, together with their first derivatives or chords of $\frac{6}{3}$, were obtained, and the series could be harmonised as in Ex. 2.

Besides this additional harmony, there was also gained, the means of transposing the music a fourth higher. \dagger

When the notes, C#, F#, and G# were obtained, there was an accession of five common chords, viz.: D major, E major, A major, F# minor, and C# minor; and of their first derivatives (or chords of ⁶/₉); and the accompaniment became as in Ex. 3.

The note E_b completed the harmony, by the addition of two more common chords, viz.: E_b major and C minor, together with their first derivatives or chords of $\frac{6}{3}$; the total number being fifteen common chords, and their fifteen derivatives. The series could, therefore, be now harmonised as in Ex. 4. But in the early times the harmonic relations extended merely to the closes of the Church melodies, where they are most perceptible; and "Although the

^{*} P. 8.

[†] This is the only use made of the Bb in all the Roman ritual books, in which no other chromatic note is to be found.

influence of the harmony of the more modern music was as yet very inconsiderable, frequent complaints were made against it by many church directors, and these innovations were looked upon as falsifications, and interpolations of the genuine Church Melodies." *—Forkel, Alg. Gesch. der Musik.

The second inversion of chords were unknown to the earlier musicians, or, at least, were not admitted by them, and the first inversions were used more frequently than the common chords themselves, which last were reserved for final chords, as may be seen in Ex. 5, taken from Alfieri;† the melody or Cantus planus being always in the alto part, and not in the upper or treble.

If we take the series of seventeen notes, which comprises all the ancient gamuts,‡ and harmonise it both ascending and descending with the simplest chords, derived from natural notes only (as in Ex. 6), we shall find no real objection to the omission of the major seventh in any cadence except the last, in which the ear, as now accustomed, will generally be dissatisfied unless the penultimate chord be major,—i. e., unless it contain the major seventh to the final note of the series.

But if we take the separate portions of this harmonised series, which form the cadences of the various gamuts, the strict observance of this simple harmony and the consequent closing by means of an ascending whole tone, will be offensive, more or less, to modern experience. For this rigid observance allows only such harmony as

^{*} According to Le Beuf these changes first "came into vogue at Sens, and were further diffused by one Jean Cousin."—Traité Historique sur la Chant Ecclésiastique.

^{† &}quot;Accompagnamento coll' Organo." Roma, 1840

[‡] See p. 8.

in Ex. 7 in the Doric mode, and similar harmonies must be applied to every gamut having a minor seventh. Indeed, ancient musicians were constrained to the use of this harmony before the octave was divided into twelve semitones,* and that they did use it we see in the above example (5). In the latter half of the sixteenth century, the final cadence in every mode except the Phrygian (or third and fourth tones) was made by means of the major seventh to the final of the mode.† The chord of the dominant seventh was not used in church music, even by the masters of the seventeenth century, except very sparingly, and is not found among the early madrigal writers in final cadences. This chord, and all other discords derived from it, as well as the second inversion of common chords, were introduced by degrees, and at first in secular music alone. The second inversion of common chords do not, strictly speaking, belong to church music: nor does the second inversion of the chord of the dominant seventh (or chord 5), although these are found in the lighter kinds of compositions.

THE DORIC MODES.

The method of harmonising these Gamuts at the commencement of the eighteenth century, is given in Ex. 8 and 9. It is to be observed that in all cases, the minor seventh of a mode was arbitrarily changed to major, and the cadence in a plagal mode was sometimes on the major, and sometimes on the minor chord of its initial note, i. e.

^{*} Bedos de Celles thinks the commencement of the insertion of the semitones was made in the thirteenth century in the church of St. Salvator, at Venice.

[†] The invention of the harmony of the dominant is ascribed to Claude Monteverde, about 1590.

when this note was the dominant of the *authentic* mode. But the cadence was more generally made (when the melody was in the plagal mode) on the *major chord of the final.** Moreover the sixth was never changed from major to minor, nor vice versâ. For by so doing, an authentic mode is turned into a plagal one, or a plagal mode into an authentic.†

The law of modulation in the Doric mode is therefore as follows: The Authentic modulates directly into,

1st. The Plagal mode, i, e. into its 5th major or minor.

2nd. The Myxolydian mode, ,, 4th major.

3rd. The Lydian mode, ,, 3rd major.

4th. The Ionian mode, ,, 7th major.

Consequently the Plagal modulates directly into:

1st. The Authentic mode, or 4th major or minor.

2nd. The Lydian mode; ,, 6th major. 3rd. The Ionian mode, ,, 3rd major.

3rd. The Ionian mode, ,, 3rd major. 4th. The Mixolydian mode ,, 7th major.

This will be seen on examining the examples 10, 11.

The Doric modes do not allow modulation into the minor fifth of the plagal mode, thus:—



- * The words "initial" and "final" are here used as they are explained in p. 10.
- † It was, in later times, the rule to make the seventh major whenever it occurred between two finals.
- ‡ It will be observed, the final note of the Lydian mode is the dominant of the Hypo-Doric. See p. 11.

nor do they allow modulation into the major fifth of the authentic to be made thus:—



The former of these cadences belongs to the hypo-Mixolydian mode, and the latter to the Phrygian, both of which modes have a character distinct from the Doric, as will be seen hereafter. But the plagal Doric does admit a modulation into the Phrygian mode, thus:—



although there are very few instances of this cadence being employed in the earlier music, for the upper notes of the Phrygian do not properly belong to the plagal Doric mode, and this manner of treating it was not introduced until after the practice of transposing this mode a fourth higher than its proper seat, and its consequent separation from its authentic on its legitimate seat (D), was established, * since when, there was frequent use made of the Phrygian cadence on A, thus:—



^{*} That is, not until after the completion of the Chromatic scale.

yet the following modulation is not found when the plagal Doric is transposed from A to D.



The modern minor gamut differs from the plagal Doric, inasmuch as it allows an indirect transition through the seventh major into the fifth minor, which the hypo-Dorian gamut does not allow. The difference between the authentic Doric and the modern minor gamut is four-fold, since the former does not allow modulation into the fourth *minor*, nor into the sixth, nor into the fifth major; and the latter does not allow a transition (directly at least) into the fourth major.

From the foregoing, it is evident that the plagal Doric mode in its legitimate seat has no power of itself, but is entirely subject to and dependant on its authentic. And therefore, whenever we find the plagal mode transposed, the authentic is transposed also the very same interval.

There are numerous examples of the transposed Hypo-Dorian melodies, and which are usually denoted by the words tonus primus, and they are generally mistaken for the authentic mode. A specimen hereof is given in Ex. 12, the final chord of which is major according to the general rule in plagal modes. The last three chords in every mode, except the Phrygian, were frequently major, yet it was the general rule, that the last chord should be unaltered from minor to major, when the melody was in the authentic mode.*

^{*} See Alfieri "Accompagnamento coll' Org.," p. 48.

Examples 13 and 14 are specimens of the chorale, or hymn tunes of the reformed church, harmonised according to the foregoing rules. The 15th example is from John S. Bach's celebrated chorale in the Doric mode seated on E.*

Ex. 16 is a specimen of mixed Doric, from the Roman ritual books, the third line of the verse being in the plagal mode seated on D, is therefore treated as if the authentic were seated on G. Advantage is taken of this licence of mixing the modes in the fourth line, the melody of which is wholly in the authentic mode.

Another, and an important advantage can be taken of this licence, namely, that by it we can retain the ancient form of the plain chant in the second tone, without making the sub-final major, as in Ex. 17; the ultimate chord being that of the sixth, or dominant of the plagal mode.† This is perfectly legitimate, and this method of treating the melody retains its grand ecclesiastical character. The "mighty harmonist," Bach, made wonderful use of the transposition and mixture of the modes, and he appears to have preferred the plagal modes. Specimens of his harmonies are given in Ex. 18 and 19. The examination of the works of this great master, shew that his harmonies rarely deviate from the laws of the ancient modes. He never absolutely reduced them to the modern dual gamuts.‡

^{*} In later times, both the authentic and plagal Doric were seated also on C, and as high as F and G.

[†] It will be seen hereafter that all the "Gregorian tones" can be treated in a similar way, and their ancient forms preserved from change.

[‡] Handel's chorus, "I will exalt Him," in Israel in Egypt, is one of the latest specimens of mixed Doric.

The madrigal writers used these modes in a mixed form, generally seated on D, with B½, and B½; or on G, with E½ and E¾, together with B½. The madrigal, "Upon a Bank," by Ward, is a specimen of the latter treatment; and "Hope of my Heart," by the same author, is one of the former.

THE PHRYGIAN MODES.

These are, perhaps, the grandest of all the ancient gamuts, and are adapted solely to ecclesiastical music. They have been employed by church musicians even to the present century, although in later times in connexion only with the modern minor gamut, and not as independent gamuts.

The Phrygian partakes of both a major and a minor character, and is, therefore, said to be either major or minor.* These different characters depend upon the harmony of the final note (E), and whether modulation be made into its own dominant (C) or into that of its plagal companion (A). See Ex. 20, 21, 22. In the first and last of these examples the mode is authentic; i. e., the harmonies are generated in itself.

These modes modulate freely into all the other modes; i.e., the authentic mode modulates into the Lydian or 2nd major,

2nd into the Mixo-Lydian or 3rd major, 3rd into the Æolian,† as well as into the hypo-Phrygian, or } 4th minor,

^{*} It has been said the Phrygian modes are neither major nor minor, but this was meant contemptuously.

[†] This mode has for its final the same note that the plagal Phrygian has for its dominant.

4th into the Ionian,* or 6th major, 5th into the Dorian, or 7th minor,

Hence the hypo-Phrygian modulates,

1st into the Lydian, or 5th major, 2nd into the Mixo-Lydian, or 6th major, 3rd into the Ionian, or 2nd major, 4th into the Dorian, or 3rd minor,

5th into its Authentic mode or 4th major or minor.

These modulations will be perceived in the Ex. 23, 24, 25, 26, 27, and 28.

The specimen, Ex. 23, is wholly authentic; its modulations are into the Mixo-Lydian and Lydian modes.

Ex. 24 is also wholly authentic, although its harmony is principally that of the dominant of the mode.

The first line of the hymn, in Ex. 25, commences with the harmony of the hypo-Dorian on D, and this harmony is employed at the beginning of the fourth line. At the last word of the third line of this hymn is a remarkable instance of the transposition of the modes a fourth higher, by means of the note Bb, and of the irregularity which crept into the Romish ritual music; the passage appears to be in the hypo-Doric mode on D, but it is really in the Phrygian mode on A and hypo-Phrygian, or fourth tone on E, and the harmony at the close of this line, which appears to be that of the Lydian mode, is really that of the authentic dominant (i. e, 6th from A).

Ex. 26 and 27† are in the plagal mode, and are regular. Ex. 28

^{*} The Ionian mode has the authentic Phrygian dominant for its final.

[†] In Ex. 27 no attention is paid to the somewhat modern rule, to make "sol sharp, when it is between two la's."

is the beautiful hymn, "Creator Alme siderum," the music whereof is genuine Phrygian, both in melody and harmony.

There is a great number of beautiful specimens of ancient church music in these modes—perhaps more than in any other mode; but there are more in the plagal mode, or fourth tone, than in the authentic, or third tone. In the Psalmody of the early reformed churches, the Psalm-tunes, or chorâle, are principally in the authentic, and those in the plagal mode are generally transposed either a third or fourth higher, or a tone lower. The Ex. 29 is in the legitimate seat. Ex. 30 is transposed on D, i. e., it is hypo-Phrygian seated on A. Ex. 31 is seated on G, and is harmonised by Graun in the authentic mode.

Ex. 32 and 33 are one and the same in melody, viz.:—hypo-Phrygian, but Bach has harmonised it in two ways; in the latter example he has mixed the hypo-Dorian on D, with the Phrygian on D. Indeed, Bach's wonderful power consisted in the extraordinary way in which he mixed the Church modes.*

The Phrygian mode never becomes the modern minor gamut, for it cannot modulate into its fifth, either major or minor, in the way the latter does, because of its minor second, and all cadences on the final are effected by descending one or two degrees, or by ascending one degree thereon, in the following manner:—



* See Forkel's Life of J. S. Bach.

The practice of transposing the plagal mode a fourth higher, and thereby making the final of the authentic to coincide with the *initial** note of the plagal mode, is said to have been for the purpose of alternate singing by two choirs, one of which was made to answer, in the plagal mode, to the other in the authentic.

THE LYDIAN MODES.

The authentic Lydian mode appears to have been the most perplexing to the musicians of the fifteenth century, and its banishment was one of the first consequences of the substitution of the hexachord gamut on F-fa-ut. Glareanus says:—"it was rarely met with in his time.* As if there had been a conspiracy against this mode, and it had been banished by a public decree."†

The hexachord F-fa-ut fascinated Guido and many others, because they were able to "Organize" F-fa-ut, with a perfect fourth (Bb). But the consequent alteration in the Church melodies of the fifth tone, gave offence to the clergy and monks, who wished to preserve the purity of Ecclesiastical music, and he was obliged to quit his monastery.‡ However, in time, the hexachord itself gave place to the hypo-Lydian mode, as the knowledge of better harmonies became more developed.

Yet there still remain beautiful specimens of music in the authentic Lydian, the melodies and harmonies of which are of a joyous and elegant character.

* See p. 10. † Dodecahedrom, 1547.

[‡] It cannot be supposed they were jealous of his having the great merit of improving music as a science, or that they were actuated by any paltry motive. Something of importance caused their rigour.

The Lydian modes are connected with all the other modes, except the Phrygian, i. e., the authentic mode modulates directly,

1st. Into the Dorian, or 6th minor.

2nd. Into the Æolian, or 3rd minor.

3rd. Into the Ionian,* or 5th major.

4th. Into the Mixolydian, or 2nd major.

And consequently, the plagal mode modulates freely into the Dorian, or 2nd minor.

2nd. Into the Æolian, or 6th minor.

3rd. Into the authentic mode, or 4th major.

4th. Into the Mixolydian, or 5th major.

These modulations will be seen on examining the Ex. 34, 35, 36, 37, 38, and 39. Example 38 is in the plagal mode, in its legitimate seat. There are many antiphons, graduals, etc., said to be of the fifth tone, but which are properly of the sixth. They are specimens of the plagal mode set on F with Bb. One of them will be seen in Ex. 40. Ex. 41 in its terminal is really in the sixth tone, and therefore partakes of both the authentic and plagal on F.

Ex. 42 is taken from the same ritual book, and is marked therein tone six, with Bb. in the signature. It is the plagal mode seated on F. The Psalm-melody, Ex. 43, which follows, is in its proper seat, viz.:—with A for its dominant, and its final note F. These four examples are sufficient to shew the use made of Bb in the middle ages, namely, transposition and mixing (or rather, confounding) the authentic and plagal modes, and causing considerable perplexity to the student.

^{*} The final of the Ionian mode is the eighth note of the hypo-Lydian. See p. 8.

Ex. 44, is the well known Psalm-tune called St. Anne's; it is given as a specimen of the difference of the harmony in the Lydian mode from that in the modern major gamut. The seat of the mode is C, with its major fourth F_{\sharp} . In the third line, there is a transient modulation into the Doric mode on A (the sixth), and in the fourth the plagal-Lydian on C is also transiently introduced. These are denoted by the note F_{\sharp} .

The foregoing examples sufficiently prove the Lydian modes are not exactly the modern major gamut, for although the plagal mode is constructed like it, there is a difference in the manner of treating them with respect to their accompaniment; and also in the circumstance of the mode not allowing any indirect modulation.* The major fourth in the authentic mode prevents any modulation into the fourth, but it enables free modulation into the second major, whereas the modern major scale allows only a transition into the second minor. These circumstances make an essential difference in the characters of the two kinds of major gamuts.

THE MIXO-LYDIAN MODES.

This pair of relative modes differ from every other pair of Church gamuts, inasmuch as one of them is major and the other minor. Nevertheless, the minor plagal is subject to the major authentic in the same way as every other plagal mode. Their harmony accompaniment is shewn in Ex. 45 and 46, and these, together with the

^{*} For example: the Lydian modes do not modulate into the Phrygian, (or major seventh in the authentic, and major third in the plagal mode,) whereas a modulation into the third of the major scale is now a very common practice.

examples which follow them, will illustrate the connexion between them and all the other modes except the Phrygian.

The authentic mode modulates directly into,

1st. the Dorian mode, or its 5th minor.

2nd. Æolian mode, "2nd minor.

3rd. Lydian mode, ,, 7th major.

4th. Ionian mode, ,, 4th major.

Hence the plagal mode modulates into:

1st. the Æolian mode, or its 5th minor.

2nd. Lydian mode, ,, 3rd major.

3rd. Ionian mode, ,, 7th major.

4th. Authentic mode, ,, 4th major.

The Mixo-Lydian modes, like the Dorian authentic mode, never modulate into the Phrygian, although the last modulate freely into them both.

The authentic Mixo-Lydian is not the modern major gamut; for the latter allows direct modulation into the fifth major, and indirect (by means of this fifth) into the third minor, and also (through the key of the sixth minor) into the third major. The mode, on the contrary, allows modulation into the fifth minor, (which the modern gamut does not allow,) and it cannot modulate into the third either major or minor.* Moreover, the Mixo-Lydian modulates freely into its seventh major—whereas, the modern gamut cannot do this, because its seventh is the sub-semitone.

The authentic Mixo-Lydian was not reduced to our major gamut

^{*} That is, by means of what is now called the harmony of the dominant. Cadences are made on the minor chord of the Phrygian final by passing thereto, at once, from the chord of the Æolian final. See Ex. 51 at the first pause.

before the middle of the last century, since when there is very little, if any, difference in the method of treating secular and sacred music.

There is a great number of beautiful specimens of church music in these modes, in the ritual books. Ex. 47 and 48 are authentic. Ex. 49 is plagal. The fine melody in Ex. 50 is ascribed to St. Gregory the Great, the harmonies of which are taken from a German manual. The Psalm-melody, Ex. 48, shews the use of the dominant of the plagal mode, for although it is in the authentic mode, both the melody and harmony close on this dominant.

The reformed psalm-books are also rich in Mixo-Lydian melodies, of which Ex. 51 is a specimen, by the renowned Bach. At the period of the "Great Reformation," the plagal Mixo-Lydian had been removed from its legitimate seat (on D) and placed on G and A. This was done for the purpose of alternate singing by two choirs, so that the authentic and plagal should be on the same pitch. Ex. 52 is a specimen of this mixture of the modes, the plagal being denoted by Bb;* the melody in these places should be harmonised as if the authentic were removed to C.

Although the hypo-Mixo-Lydian is constructed like the Dorian authentic, it has not the same final nor dominant as the latter mode. Nor are the two modes treated in the same manner in their accompaniment; for the Doric has its own harmony, whereas the hypo-Mixo-Lydian depends on the harmony of its authentic supe-

^{*} It was a rule, whenever the note B was placed between two A's, as in the example, to make B flat. This took place at first in the first and sixth tones, but in the course of time it occurred in all the tones, and led the way for the ultimate reduction to the modern scales.

rior. Moreover, in this plagal mode, the melodies end on the *final* or *dominant of the authentic mode*, and not on its initial note.*

The removal of a plagal mode from its legitimate seat, and from the authority of its authentic superior, makes it an independent mode, and causes it to be confounded with some other. This is seen in Ex. 53, which is said to be hypo-Mixo-Lydian on A, but it is more properly Dorian on A. The proper seat of the mode has great influence on the character of the melodies set therein. Hence the Doric is called "grave"—the Phrygian, "exulting"—the Lydian, "joyous," "devout," &c. It was not without reason Adam de Fulda said:

- "Omnibus est primus, sed et alter tristibus aptis,
- " Tertius iratus, quartus dicitur fieri blandus.
- " Quintum da lætis, sextum pietate probatis,
- " Septimus est juvenum, sed postremus sapientium." †

Sebastian Bach was nearly the last musician who harmonised according to the laws of the old modes. In his harmonies he has mixed them, and in a wonderful manner developed their grandeur and rich resources. He never lost sight of their construction, however he may have refined their rigid harmonies by using discords of later invention. Ex. 54 shews his method of mixing

^{*} The Doric, when transposed on G or A, has been mistaken for the Mixo-Lydian plagal mode. The madrigal writers made frequent use of the mixture of the Doric authentic with the authentic Mixo-Lydian; a beautiful specimen whereof, (mixed also with the Æolian) on G, is the madrigal—" Sweet Honey-sucking Bees," by Wilbye.

[†] See Gerbert, tom. ii.; and the Divina Psalmodia of Bona.

the Eolian and Doric modes on A. Ex. 55 is a similar specimen of the same modes on G.

The examples 56 and 57 are inserted to shew more immediately the difference in a psalm tune harmonised in the modern secular gamut and in the Mixo-Lydian mode.

There is an abundance of madrigals set in this authentic mode; amongst those of the less complicated kind may be mentioned,—
"There is a Lady"—and Weelkes' "To Shorten Winter's Sadness"
—Gastoldi's "Viver lieto voglio"—Morley's "Arise, awake, ye Silly Shepherds"—Bennett's "Thyrsis, sleepest thou," &c. &c. &c.

THE ÆOLIAN MODES.

The authentic of these being seated an octave higher than the Hypo-Dorian,* and similar to it in construction, has so far supplanted the latter mode that it is used for it when placed higher than E.

The harmonies proper for the accompaniment to the Æolian modes are shewn in Ex. 58 and 59; and it is to be observed, that the authentic mode never modulates into the fifth, in the way that the modern minor gamut does.† But whenever a cadence is formed on the fifth (or dominant of the mode,) it is always in the Phrygian mode.‡ Neither is this mode the same as the Hypo-Dorian;—for the latter, being a plagal mode, receives its harmonies from, and is subject to the authentic Doric mode; whereas, the Æolian has its own harmonies, like all other authentic modes.

^{*} See pp. 8-9.

[†] That is, by means of what is called the harmony of the dominant of the new key. ‡ See p. 40.

The Æolian modes modulated freely into all the other modes; that is, the authentic mode modulates,—

1st into the Phrygian or its 5th major or minor.

	<i>J</i> O			U
2nd	Dorian	,,	$4 ext{th}$	\min
3rd	Lydian	,,	$6 \mathrm{th}$	major.
4th	Mixo-Lydian	,,	$7 \mathrm{th}$	major.
5th	Ionian		3rd	major.

And consequently the plagal mode modulates,—

```
1st into the Authentic or its 4th minor.
2nd Doric ,, 7th minor.
3rd Lydian ,, 2nd major.
4th Mixo-Lydian ,, 3rd major.
5th Ionian ,, 6th major.
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These modes were not much used by the ancient church musicians; they are rarely met with in the ritual-books of the Roman Church, yet some of the hymns, antiphons, &c., which are ascribed to the Doric modes, belong originally to the Æolian authentic. The antiphon shewn in Ex. 60 is taken from the ritual books, and is usually given in the modern graduales as belonging to the first tone. There can be no doubt that the melody called the "eighth irregular" is Æolian, and it is given as the ninth tone in the ritual-books now in use at Rome, wherein (according to Padre Alfieri*) it is written in the authentic Æolian mode seated on A, in which position it has always been performed in the Apostolic Chapel. See Ex. 61.

There are many specimens in the psalmody of the reformed churches, two of which are given in Ex. 62 and 63. The latter of these is harmonised by Bach, and it appears, by the frequent use he

^{*} See "Accompagnamento coll' Organo." Roma, 1845.

makes of the major chord on the final, that he considers this somewhat as a plagal mode, since it was not the rule to close an authentic mode with a major chord on its final, unless the mode were major.

The legitimate seat of the plagal Æolian mode is identical with that of the Phrygian.* But the Phrygian being an authentic mode cannot be treated as plagal. All confusion of the two modes was avoided by separating the plagal Æolian from its authentic mode, and placing it (generally) a fourth higher, by means of Bb, and by treating it as an independent gamut. This will be seen in Ex. 64. Ex. 65 is taken from the ritual books as a specimen of the Hypo-Æolian, and towards the end, the mode is transposed a fourth higher. Ex. 66 is taken from the psalm-books of the German and other reformed churches, and is a very old specimen.

It is remarkable that the old masters avoided all cadences, or modulations into the Doric. Bach uses them, but he sometimes employs a major chord on the final of the Doric mode, perhaps because this leads directly to the Mixo-Lydian authentic mode. See Ex. 67 and 68, in the former of which is a cadence on the authentic Doric (in the eighth measure), and in the latter one on the plagal Doric on D (in the eighth measure). In Ex. 69 is a cadence on the Doric major, but it is evidently plagal, because of the Bb which appears just before it in the second treble part (in the sixth measure). In Ex. 70 (in the second measure) is the same major chord on the Doric authentic, in its first inversion. Ex. 71 is the psalm tune called "St. Bride's;" it is in the Æolian mode, and harmonised according to the laws of the mode. The third line is wholly Phrygian, and comprehends the entire gamut. Ex. 72 is another psalm

^{*} See pp. 8-9.

tune in the Æolian authentic on G, mixed with the Doric on the same note in the third and fourth lines.

THE IONIAN MODES.

The harmonies proper for the accompaniment to these gamuts are given in Ex. 73 and 74, and it is remarkable that they have no immediate connexion with the Phrygian mode, although they modulate freely into every other. Thus, the authentic Ionian modulates directly into:

1st, the Lydian mode,or its 4th major2nd,Mixo-Lydian,5th major3rd,Æolian,6th minor4th,Dorian,2nd minor

And, therefore, the plagal Ionian passes freely into:

1st, the Authentic Ionian, or its 4th major 2nd, Lydian, 7th major 3rd, Æolian, 2nd minor 4th, Dorian, 5th minor

Ex. 75 is the Sanctus in the gradual of Paul the Fifth, and it is a fine specimen of the authentic Ionian.

The rigid law of the Ionian modes does not allow any modulation into the third either major or minor. This could not have been done before the note D# was admitted, and such modulation was avoided as much as possible, even after the admission of this note, in all kinds of church music until the time of Bach and Handel. Ex. 76 is a specimen containing the above modulation into the third of the mode, in the fifth measure from the end of the choral. But the cadences on the third were generally formed by the harmony of the final, or of the Æolian final, or of the Æolian dominant, as in Ex. 77 in the second measure, and Ex. 78 in the third measure.

The Plagal, or Hypo-Ionian mode, is rarely met with in its legitimate place, perhaps on account of its similarity to the Mixo-Lydian, which is substituted for it; but there are examples of Hypo-Ionian on C with Bb; that is, they are said to be Hypo-Ionian, although they do not ultimately close with the harmony of the final, nor that of either of the dominants. But where a plagal mode was transposed, it was not unusual to treat it as an independant mode, and (in all cases) to close it finally with the major chord of the *initial note*. Ex. 79 is a specimen hereof. In the third line we find the authentic with a close on the Æolian mode, and it is evident this line cannot be Mixo-Lydian (transposed on C).

It suited the convenience of the writers of madrigals, and of the more elaborate kinds of church compositions, to have all the plagal modes transposed to the same pitch as their authentics, and, (after the establishment of what is called the "harmony of the dominant,") to make the *initial note* the final. By this means composers were enabled to alternate between authentic and plagal modes, turning the one into the other, without altering the pitch. Hence, in all the later writings, from the beginning of the sixteenth century until the middle of the seventeenth, the modes assume the positions represented in Ex. 80.

It is evident that the original signification of the words authentic and plagal was being destroyed, and we see some of the steps which led to the ultimate reduction of them all to the present Neapolitan system, the consequences of which are the mutilation of the ancient church melodies, the loss of the art of composing music of a true ecclesiastical character, and of the madrigal school.*

In conclusion. The psalm melodies of the first and sixth tones (the Dorian and Hypo-Lydian modes) have the same note for their dominant, but not the same note for their finals. Moreover, the final of the sixth tone is the same as the dominant of the second tone (the Hypo-Dorian); hence these two modes (the first and sixth) have cadences in common.

Similarly, the third and eighth tones (the Phrygian and Hypo-Mixo-Lydian) have the same note for their dominants, but not the same note for their finals. Hence these modes also have a common closing cadence, viz., on their dominants. And it may be assumed that those melodies ending in G, usually attributed to the third tone, should be transferred to the eighth tone, unless the final chord be that of the plagal dominant.

Since in every pair of authentic and plagal modes there are one final, and two dominant notes, we have a choice of three closing

* The practice of transposing the modes was common towards the end of the fifteenth century, and the alternating between the Lydian and Mixo-Lydian (transposed on C with Bb), was considered as making the nelody more agreeable: "Plerumque enim alternæ Lydiæ Mixolydiæ modulationis commutatione redditur concentus suavior quod potissime Ambrosiani nostri in ecclesiasticis observant modis, quum quintum ipsum et septimum commutatione b duræ qualitatis in b mollem tanquam diapentes vel diatesseron specie commixtos solent."—Gaforius, Musica Practica, Lib. i. cap. 7. 1496.

harmonies, namely, the chord of the final and the chord of either of the two dominants in every mode, according to circumstances. Ex. 81 is the psalm-melody of the first tone, as harmonised by Thomas Tallis, with cadences on the plagal dominant (F). Ex. 82 is the same melody as given in the ritual books, and harmonised wholly in the authentic mode. Ex. 83 is the psalm-melody of the second tone as used in the Romish chapels in England. This melody is commonly found ending on D in the ritual books, and on G in the harmonised versions, and is usually treated as belonging to the modern minor gamut; but in this example its closing harmony is on the dominant of the plagal mode transposed on D. Ex. 84 is the Roman form of the psalm-melody of the fourth tone, with its legitimate harmony in the Phrygian mode. This melody is usually found in the harmonised versions treated as if it were set in the minor key E. Ex. 85 is the psalm-melody of the seventh tone, in its more modern form, as given in the ritual books; and it will be seen that the cadences are on the plagal dominant. This chant is transposed a fourth lower in the harmonised versions, and treated therein as belonging to the modern key G. Ex. 86 is the psalm-melody of the eighth tone, and the closing chord is that of the final. Ex. 87 is the second terminal of the same chant, and which closes with the chord of the dominant of the mode (hypo-Mixo-Lydian). The harmonised versions give this melody transposed on F, and it appears therein as belonging to the modern key Bb. Ex. 88 is a third terminal of the same tone, and also on the harmony of the dominant.



A CONCISE EXPLANATION

CHURCH MODES.





Additional Common Chords





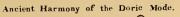


ANCIENT HARMONY OF THE 1st TONE used in the Apostolical Chapel at Rome.











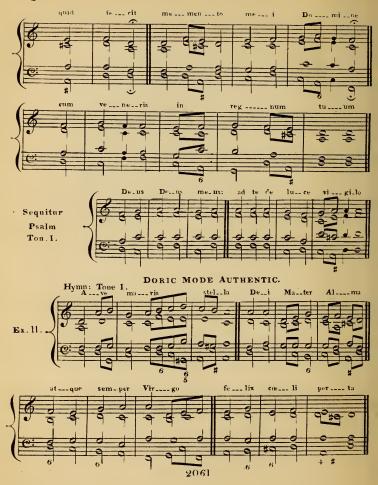




DORIC MODE AUTHENTIC.





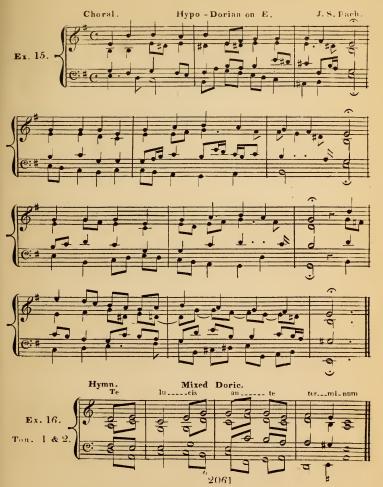




















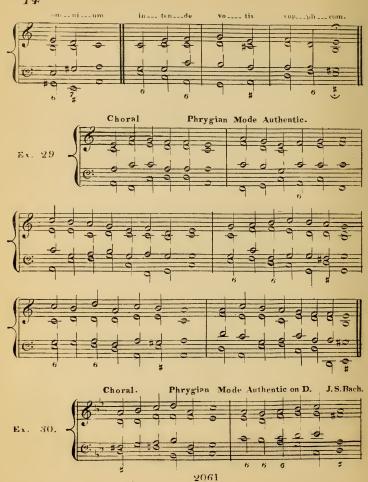








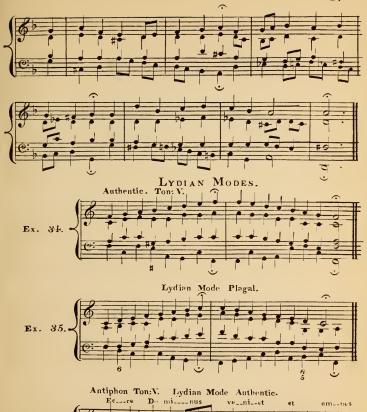




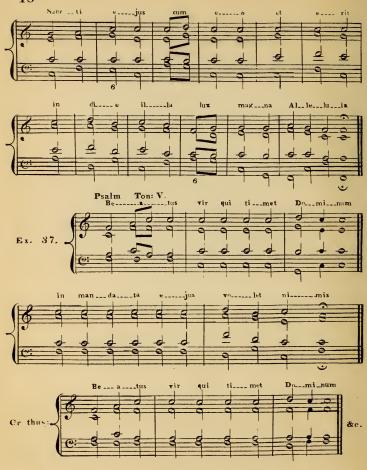


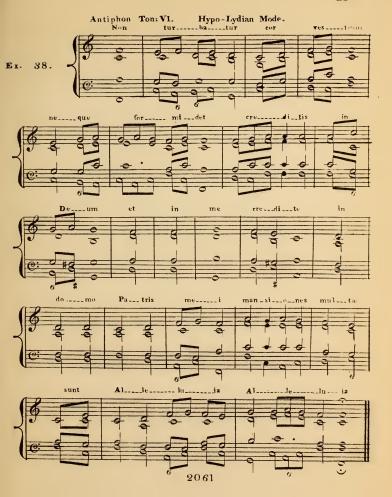


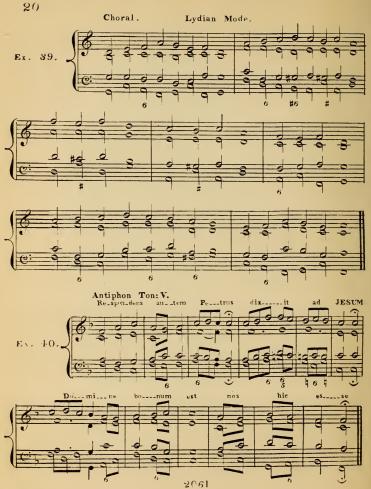
Choral in D. Hypo-Dorian & A Hypo-Phrygian mixed.











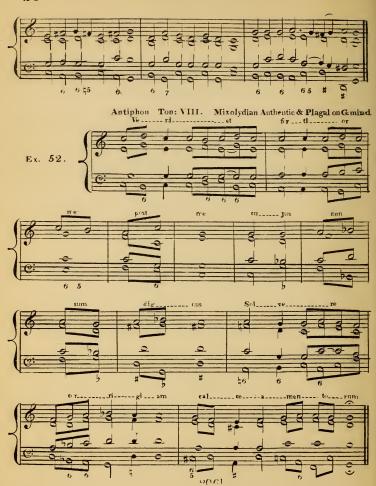


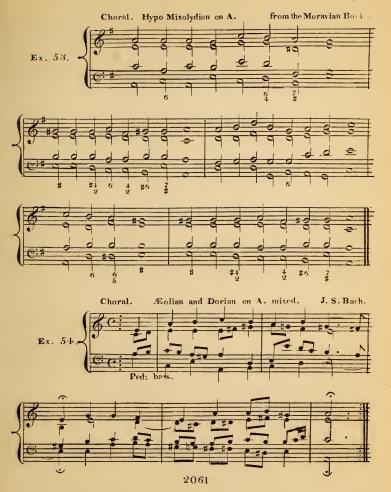












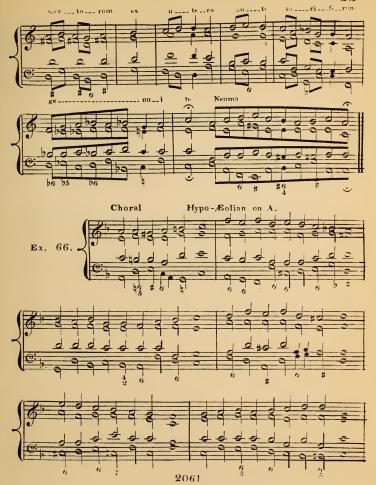






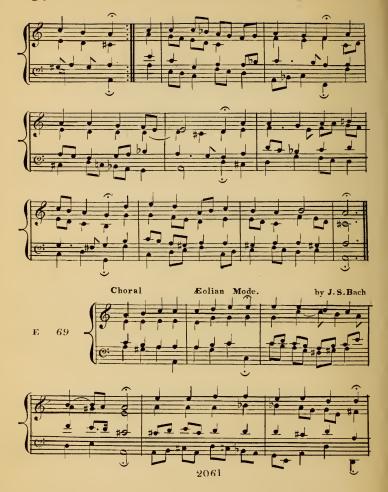




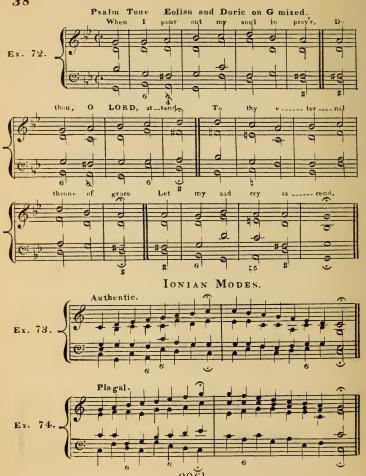














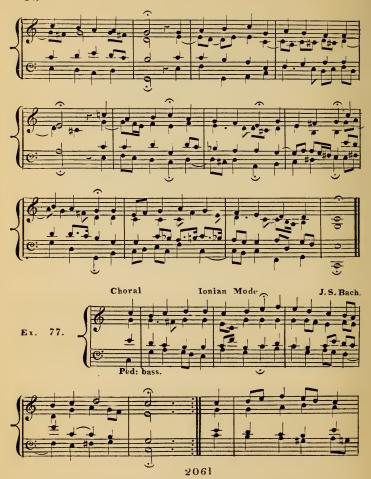




Table of the Relative Positions of the Modes as employed in the $15^{\rm th}\,\&\,16^{\rm th}\,\text{Centuries.}$





The same Melody from the Ritual Books.







Gaylord Bros. Makers Syracuse, N. Y. PAT. JAN. 21, 1908

